



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
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ALAMEDA POINT  
SSIC NO. 5090.3

September 28, 2001

Glenna Clark  
BRAC Operations, Code 06CA.GC/0718  
Department of the Navy, Southwest Division  
Naval Facilities Engineering Command  
1230 Columbia Street, Suite 1100  
San Diego, CA 92101

RE: Draft Action Memorandum for Site 5, Cadmium Non-Time Critical Removal Action,  
Draft Action Memorandum for Site 14, Dioxin Non-Time Critical Removal Action and  
Draft Action Memorandum for Sites 4 and 5, Dense Nonaqueous phase Liquid and  
Dissolved Source non-Time Critical Removal Action, Alameda Point, Alameda,  
California

Dear Ms. Clark:

EPA has reviewed the above referenced Action Memoranda for the designated removal actions, submitted by the Navy on August 24, 2001. As part of the review, EPA verified that the Navy responses to comments that EPA submitted March 5, 2001 on the EE/CAs have been incorporated into the Action Memos. In general the Action Memoranda are satisfactory, although there are a few minor outstanding issues, primarily with respect to ARARs, that we feel may be worth mentioning. We therefore offer the enclosed comments for your consideration.

EPA supports the proposed removal actions for the various IR sites for Alameda Point. We understand that in the case of the cadmium contaminated soil removal action for Sites 5 and the dioxin contaminated soil removal action for Site 14, the Navy expects that the removal actions will be the final actions for cleaning up the soil contamination at these sites, while for the groundwater removal actions it is likely that additional remedial action will be necessary.

Thank you for the opportunity to review these documents. If you have any questions, please call me at (415) 744-2367.

Sincerely,

A handwritten signature in cursive script that reads "Anna-Marie Cook".

Anna-Marie Cook  
Remedial Project Manager

enclosure

cc: Michael McClelland, SWDiv  
Andrew Dick, SWDiv  
Daniel Murphy, DTSC  
Dennis Mishek, RWQCB  
Suzette Leith, EPA  
Michael John Torrey, RAB Co-Chair  
Elizabeth Johnson, City of Alameda

## EPA ORC Comments on Draft Action Memorandum for Site 5 Cadmium Removal

1. EPA's understanding is that the "off-site disposal" contemplated in this Action Memorandum refers to disposal in a landfill not on Alameda NAS property. In various places in the document, however, this is not clear, and there are inferences that "off site" means IR Site 1. For example, in the first page of Table 5-1B, under the column for Alternative 3 (and at several other places in the table under Alternative 3), there is reference to disposal at IR Site 1. This is confusing and should be clarified or rewritten.
2. page 9 – Action Memorandum indicates that chromium and lead were also detected in soil near the plating shop, but that this will be addressed in the RI/FS rather than in this removal. That doesn't sound very efficient. Will the soil which is excavated in this removal include the soil with the chromium and lead? If so, doesn't it make sense to design the removal to address the chromium and lead too?
3. In various places, the discussion of removal or demolition of Building 5 is unclear, e.g. on page 14 and page 15. The language "if Building 5 is removed in the future" suggests that Building 5 may be removed in the future and that may create exposure. It is not clear whether the exposure would be from cadmium under the building which would then be exposed, or whether it is the demolition itself that would cause the exposure. On page 17, the Action Memorandum clarifies that the removal action includes demolition of the plating shop and removal of the concrete floor. I am assuming that the soil which will be excavated includes any contaminated soil from under the building; however, this is not entirely clear. The Navy may wish to make some minor editing to pages 14 and 15. For example, instead of saying a potential exists for exposure... "if Building 5 is removed in the future," it might be clearer to say, "A potential for exposure would exist...if Building 5 were removed without also removing contaminated soil beneath the building."
4. Page 18. If the removal action can be completed in 8-12 weeks, why is it scheduled to continue for up to one year?
5. Page 21. The first bullet indicates that to be a state ARAR, a state requirement must be a state law. This is not correct, as discussed in our previous comment 3 on the EE/CA and as acknowledged by the Navy on page 2 of its response to comments.
6. Page 23, TBCs. The document should clarify whether these TBCs are being adopted as performance standards.
7. Page 25, Action-Specific ARARs. The document states that because action-specific ARARs depend on the action selected, they are identified after an alternative has been selected. EPA objected to this language in our comments on the EE/CA, and the Navy acknowledged in its response to comments that this language was confusing. As written,

it sounds as if action-specific ARARs are only analyzed after the preferred alternative has been decided. If that is the intended meaning, it is a procedure EPA does not agree with. Rather, action-specific ARARs should be identified for all alternatives, because one of the factors in weighing the alternatives is analyzing whether ARARs can be met. If, on the other hand, “selected” means that ARARs are identified after an alternative has been put forward as an alternative (as opposed to chosen as the selected remedy), then that needs to be clarified.

8. Page 15 discussion of AOC. As noted in EPA’s comments on the EE/CA, it is incorrect to state that if material remains in an AOC it is not subject to any RCRA requirements; rather, it is not subject to the LDRs. The Navy acknowledged this in its response to comments, but did not fix the confusing language.
9. Page 25 third paragraph, reference to groundwater from dewatering being moved outside the area of contamination. The Navy needs to clarify where the groundwater would go. If the groundwater would go to a sewer or the Bay, the document needs to identify ARARs for that disposal.
10. Tables 5-1A and 5-1B. The response to comments indicated that the action memorandum would clarify that alternative 1 did not meet the threshold protectiveness criterion, but alternatives 2, 3, and 4 met that criterion. That has not been done.
11. Tables 5-1A and 5-1B. The statement that there are no action-specific ARARs with which either alternative 2 or alternative 3 must comply is not correct. Pages 25-26 and the ARARs table indicate there are in fact action-specific ARARs.
12. Table 5-1B, Alternatives 3 and 4. As noted above, the text suggests that “off-site” refers to disposal on-base in IR Site 1. EPA’s understanding is that that is not the Navy’s intent, and should be clarified.
13. Table 5-2 ARARs Table. The response to comments on the EE/CA indicates that only the preferred alternative will be discussed in the action memorandum (see, e.g. response to comment no. 11c), and it appears that table 5-2 lists ARARs only for Alternative 3. EPA strongly urges that ARARs for all alternatives be analyzed prior to selection of the preferred alternative because compliance with ARARs is a threshold criterion, and because ARARs can affect other factors, e.g. cost. Additionally, Table 5-1B suggests that a complete ARARs analysis was performed, which does not appear to be correct.

#### EPA Program Comments on Draft Action Memorandum for Site 5 Cadmium Removal

14. Page 8, second paragraph: Possibly this paragraph was mistakenly copied from the Action Memo prepared for Site 14. Schematics of the storm sewer system from the “Storm

Sewer Study Technical Memorandum Addendum” of August 30, 2001 do not support the description of the location of storm drains given in the paragraph for Site 5. In addition, previously distributed documents such as the first draft RI for Site 5 contradict the information on hydraulic gradient and describe the groundwater flow as “radial” with not much movement either toward or away from the harbor. Please verify and, where necessary, correct the information in this paragraph.

15. Page 12, first paragraph: Potential discharge points to surface water include migration through storm drains. The sediment near storm drain outfall in the northwest corner of Seaplane Lagoon has significant levels of metals contamination, including cadmium, which is likely to have originated in the plating shop of Site 5. Although this removal action is not designed to take care of metals in groundwater, it may be necessary to address groundwater contamination at a later date if remaining concentrations of metals in groundwater are elevated above the ambient water quality criteria.

## EPA ORC Comments on Draft Action Memorandum for Site 14 Dioxin Removal

1. Page 23. The first bullet indicates that to be a state ARAR, a state requirement must be a state law. This is not correct, as discussed in our previous comment on the EE/CA and as acknowledged by the Navy on page 2, ref. 5, of its response to comments.
2. Page 27, Action-Specific ARARs. The document states that because action-specific ARARs depend on the action selected, they are identified after an alternative has been selected. EPA objected to this language in our comments on the EE/CA, and the Navy acknowledged in its response to comments that this language was confusing. As written, it sounds as if action-specific ARARs are only analyzed after the preferred alternative has been decided. If that is the intended meaning, it is a procedure EPA does not agree with. Rather, action-specific ARARs should be identified for all alternatives, because one of the factors in weighing the alternatives is analyzing whether ARARs can be met. If, on the other hand, “selected” means that ARARs are identified after an alternative has been put forward as an alternative (as opposed to chosen as the selected remedy), then that needs to be clarified.
3. Page 28 discussion of AOC. As noted in EPA’s comments on the EE/CA, it is incorrect to state that if material remains in an AOC it is not subject to any RCRA requirements; rather, it is not subject to the LDRs. The Navy acknowledged this in its response to comments, but did not fix the confusing language.
4. Tables 5-1A and 5-1B. The response to comments indicated that the action memorandum would clarify that alternative 1 did not meet the threshold protectiveness criterion, but alternatives 2, 3, and 4 met that criterion. That has not been done.
5. Tables 5-1A and 5-1B. The statement that there are no action-specific ARARs with which either alternative 2, 3 or 4 must comply is not correct. The ARARs table and the discussion in the text indicate that there are in fact action-specific ARARs.
6. Tables in Section 5. It would be very helpful to have page numbers for these tables.
7. ARARs Tables. The response to comments on the EE/CA indicates that only the preferred alternative will be discussed in the action memorandum (see, e.g. response to comment ref. 10), and it appears that table 5-4 lists ARARs only for Alternative 3. EPA strongly urges that ARARs for all alternatives be analyzed prior to selection of the preferred alternative because compliance with ARARs is a threshold criterion, and because ARARs can affect other factors, e.g. cost. Additionally, Tables 5-1A and 5-1B suggest that a complete ARARs analysis was performed, which does not appear to be correct.

## EPA Program Comments on Draft Action Memorandum for Site 14 Dioxin Removal

8. Page 9, fourth paragraph: It is unclear whether the FTA always had a containment berm or whether it started its use without a berm. Also unclear is whether the berm took six years to construct or whether the date of construction is estimated to be anywhere in the six year period. The absence of a berm for containment during early years of the FTA use may mean that dioxin contaminants are present beneath the area that is now bermed.
9. Risk Calculation and Risk Management:

Response to EPA General Comment #17 on the EE/CA does not satisfactorily address the problem. All contaminants, including background, need to be factored into the risk calculations for a site. The amount of risk attributed to background contaminants is then a factor taken into account when the BCT makes risk management decisions about a site during evaluation in the RI/FS.

Page 18 in Action Memo and Response to EPA General Comment #18 on the EE/CA: The soil at Site 14 is proposed to be cleaned up to a level that will leave a  $3.5 \times 10^{-6}$  risk under a residential exposure scenario. It is premature and inappropriate to state in an Action Memo that this risk level is protective of human health under a residential scenario since the level is above the  $1 \times 10^{-6}$  departure level and lies within the risk management range. The remaining risk at this site needs to be described in the RI/FS and a risk management decision by the BCT needs to explain in the FS whether institutional controls need to be added to the remedy for the site or whether no further action is justified.

ORC Comments on Draft Action Memorandum for Site 4 & 5 DNAPL Removal

1. Response to comments ref. 3, 8, 10, 11 indicate that disposal of contaminated groundwater would be “off site.” The Action Memorandum states that it is expected that any contaminated groundwater would be treated and discharged to a POTW (page 28, 31). EPA recommends that the response to comments be clarified to indicate that “off-site” means discharge to a POTW, not to a landfill.
2. Response to comments ref. 14. EPA understands that in removals ARARs must be complied with “to the extent practicable considering the exigencies of the situation.” However, if ARARs will not be complied with, the Navy should explain how the exigencies of the situation make compliance not practicable.
3. Response to comments ref. 18b. EPA agrees that Regional Board Resolution 88-160 is not an ARAR, but not for the reasons given by the Navy. EPA does not consider this resolution to be an ARAR because it appears to be advisory rather than enforceable. However, EPA has no objection to considering this resolution to be a TBC, and strongly urges the Navy to comply with it. EPA also notes that despite the Navy’s comments in response to ref. 18, the Navy states on page 30 of the Action Memorandum that this resolution is an ARAR, and it includes this resolution in the ARARs table.
4. Page 25. The first bullet indicates that to be a state ARAR, a state requirement must be a state law. This is not correct. A state regulation or other requirement can also be ARAR if it is a “promulgated standard, requirement, criteria, or limitation under a state environmental or facility siting law.”
5. p. 28, 31: The Action Memorandum indicates that contaminated water will be disposed of at a POTW. Because EPA considers this to be off-site disposal, requirements for discharge to a POTW are not considered to be ARARs. However, federal and state pretreatment requirements -- both substantive and procedural -- need to be complied with. The Action Memorandum should discuss what pretreatment requirements apply and how they will be complied with.
6. Page 28. EPA agrees that generally MCLs and MCLGs are generally considered to be relevant and appropriate, rather than applicable. However, the statement that MCLs and MCLGs are not applicable ARARs at Navy sites is an overstatement. EPA recommends the sentence in par. 3 be amended to state that MCLs and MCLGs are “generally” not applicable ARARs.
7. Page 29, Action-Specific ARARs. The document states that because action-specific ARARs depend on the action selected, they are identified after an alternative has been selected. This language is confusing, as the Navy has acknowledged in responding to



comments on other removal documents. As written, it sounds as if action-specific ARARs are only analyzed after the preferred alternative has been decided. If that is the intended meaning, it is a procedure EPA does not agree with. Rather, action-specific ARARs should be identified for all alternatives, because one of the factors in weighing the alternatives is analyzing whether ARARs can be met. If, on the other hand, “selected” means that ARARs are identified after an alternative has been put forward as an alternative (as opposed to chosen as the selected remedy), then that needs to be clarified.

8. p. 29 discussion of action-specific ARARs. The Navy should also consider whether the following requirements are ARARs concerning the SVE system and treatment of extracted vapors: 22 CFR 66264.1032 and following regarding air emission standards for process vents, 22 CCR 66264.1054 and following regarding pressure relief devices for gas/vapor systems, and 22 CCR 66264.341 and following regarding incinerators.
9. Table 5-1. EPA disagrees with practice of giving scores for the criterion of protectiveness; this is a threshold criterion which must be complied with. In remedial action RODs, EPA also disagrees with giving scores for the criterion of compliance with ARARs, for the same reason. EPA recognizes that this is a removal and not considered a final action. However, the Navy should still make clear whether ARARs will be complied with, and if not, the Navy should present adequate justification why compliance with particular ARARs is not practicable due to the exigencies of the situation. It is not clear from this chart whether ARARs will be complied with. This is especially important with regard to Alternative 4, the selected alternative. By giving the ARARs criterion for Alternative 4 a score of 6, the Navy implies that some ARARs will not be complied with. This should be explained.
10. Table 5-4 action-specific ARARs. See comment above regarding possible ARARs for the SVE system.

#### EPA Program Comments on Draft Action Memorandum for Site 4 & 5 DNAPL Removal

11. Page 9, second paragraph: Possibly this paragraph was mistakenly copied from the Action Memo prepared for Site 14. Schematics of the storm sewer system from the “Storm Sewer Study Technical Memorandum Addendum” of August 30, 2001 do not support the description of the location of storm drains given in the paragraph for Site 5. In addition, previously distributed documents such as the first draft RI for Site 5 contradict the information on hydraulic gradient and describe the groundwater flow as “radial” with not much movement either toward or away from the harbor. Please verify and, where necessary, correct the information in this paragraph.
12. Table 4-1: Is this table necessary to include in the Action Memo, or could a text description of the concentrations in groundwater versus the PRG suffice. The table is

labeled “risks associated with ingestion of groundwater”, but actually shows the difference between the concentrations found in the groundwater and those concentrations that would equate to a  $10^{-4}$  risk. We agreed during review of the EE/CA that presenting future risk from ingestion of untreated groundwater at Site 4 was not necessary because the risk was so high, and that a simple comparison of concentration versus PRGs would satisfactorily support the obvious need for mitigation.

In addition, the table showing risks associated with inhalation of indoor air at Site 5 is somewhat misleading in that each COC is broken out and the cumulative risk is not given. Also, the chemicals listed are only those that showed up with concentrations in excess of 10,000 ppb, and the inhalation risks associated with lesser concentrations of chemicals such as vinyl chloride have not been included. While it is important to support showing that a removal action is necessary, this table appears to underplay the risk from inhalation by not summing the risk and not acknowledging that other chemicals not covered in this removal action will also factor into the inhalation risk.